

Department of Environmental Protection Performance Review

Director: Bob Hoyt
28 February 2012

CountyStat Principles

- **Require Data-Driven Performance**
- **Promote Strategic Governance**
- **Increase Government Transparency**
- **Foster a Culture of Accountability**



Agenda

- **Welcome and Introductions**
- **Annual Headline Measure Performance Update**
- **DEP MC311 Data Analysis**
- **Wrap-Up and Follow-Up Items**



Tracking Our Progress

■ Meeting Goals:

- Identify areas of DEP operations that based on performance trend lines should be targets for further improvement
- Determine if the retirement of the legacy DEP OSCAR system is having an impact on departmental operations

■ How we measure success

- Comparison of headline performance measures to pervious year's performance will determine if departmental operations are improving, maintaining, or declining
- Examination of the number of service requests that are filed via the web portal will determine if offering services online reduces call volume



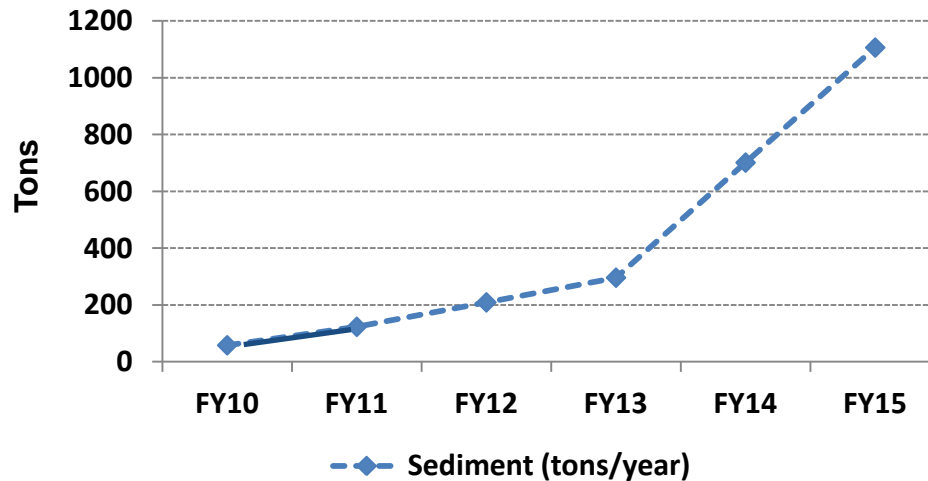
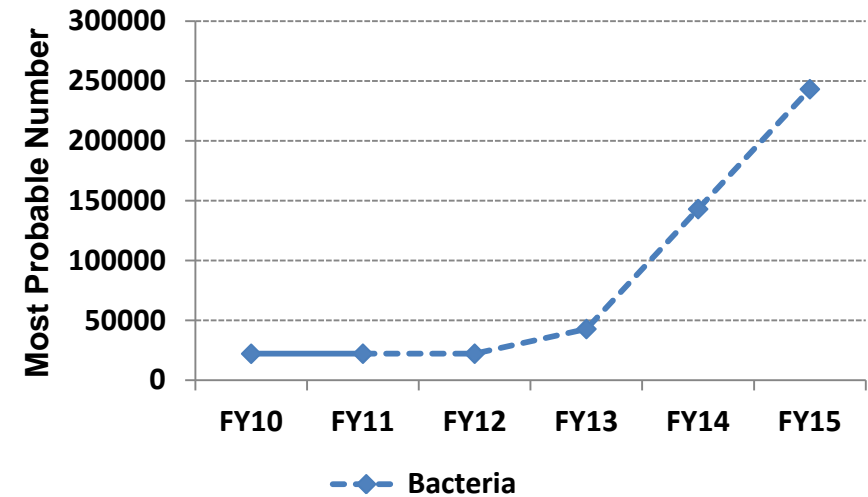
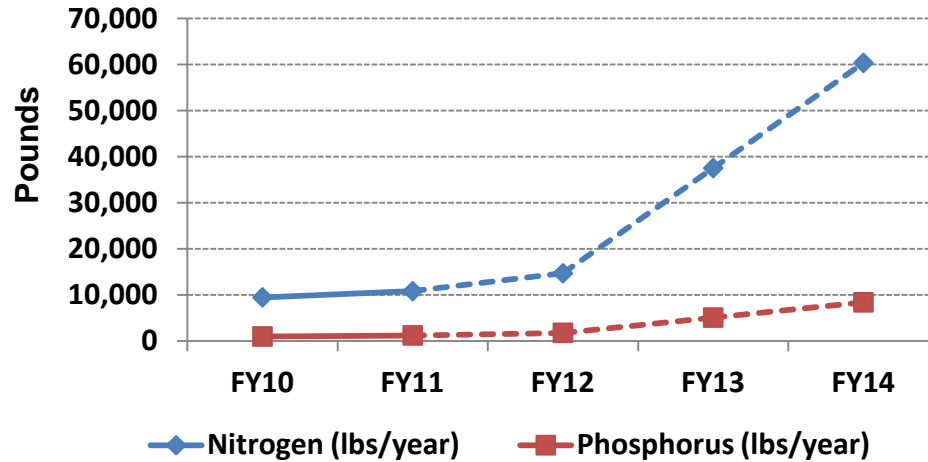
Headline Measure: Amount of Pollutant removed through the Watershed Program (Nitrogen, Phosphorus, Sediment, Bacteria)

	Actual		Projections			
	FY10	FY11	FY12	FY13	FY14	FY15
NITROGEN (LBS/YEAR)	6,897	9,490	10,838	14,709	37,524	60,339
PHOSPHORUS (LBS/YEAR)	648	1,006	1,242	1,800	5,110	8,419
SEDIMENT (TONS/YEAR)	58	123	209	296	701	1,106
BACTERIA (MPN/YEAR)	22,061	22,086	22,086	42,734	142,946	243,158

A requirement of the County's NPDES MS4 Stormwater Permit is to reduce these pollutant loadings to the point at which the County's waterbodies fully meet water quality standards.



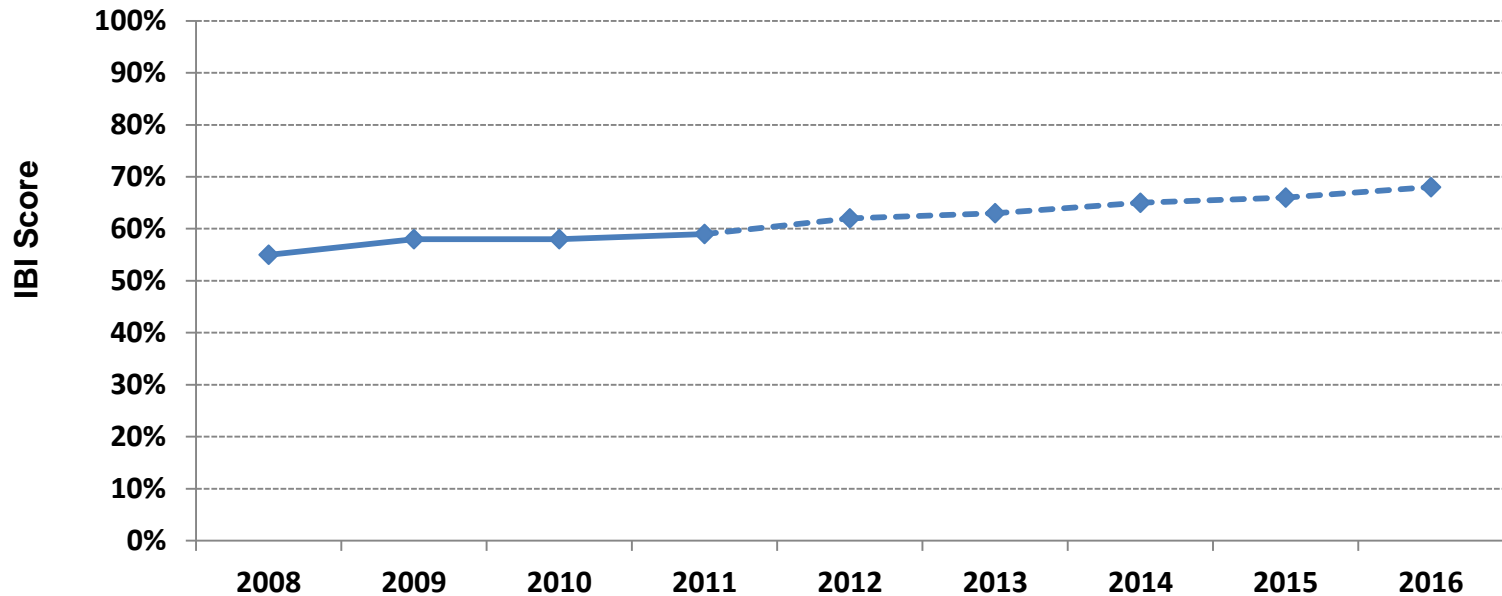
Headline Measure: Amount of Pollutant removed through the Watershed Program (Nitrogen, Phosphorus, Sediment, Bacteria)



Most Probable Number is the statistical forecast of the presence or absence of bacteria in numerous samples.



Index of Biological Integrity (IBI) Score in County Watersheds

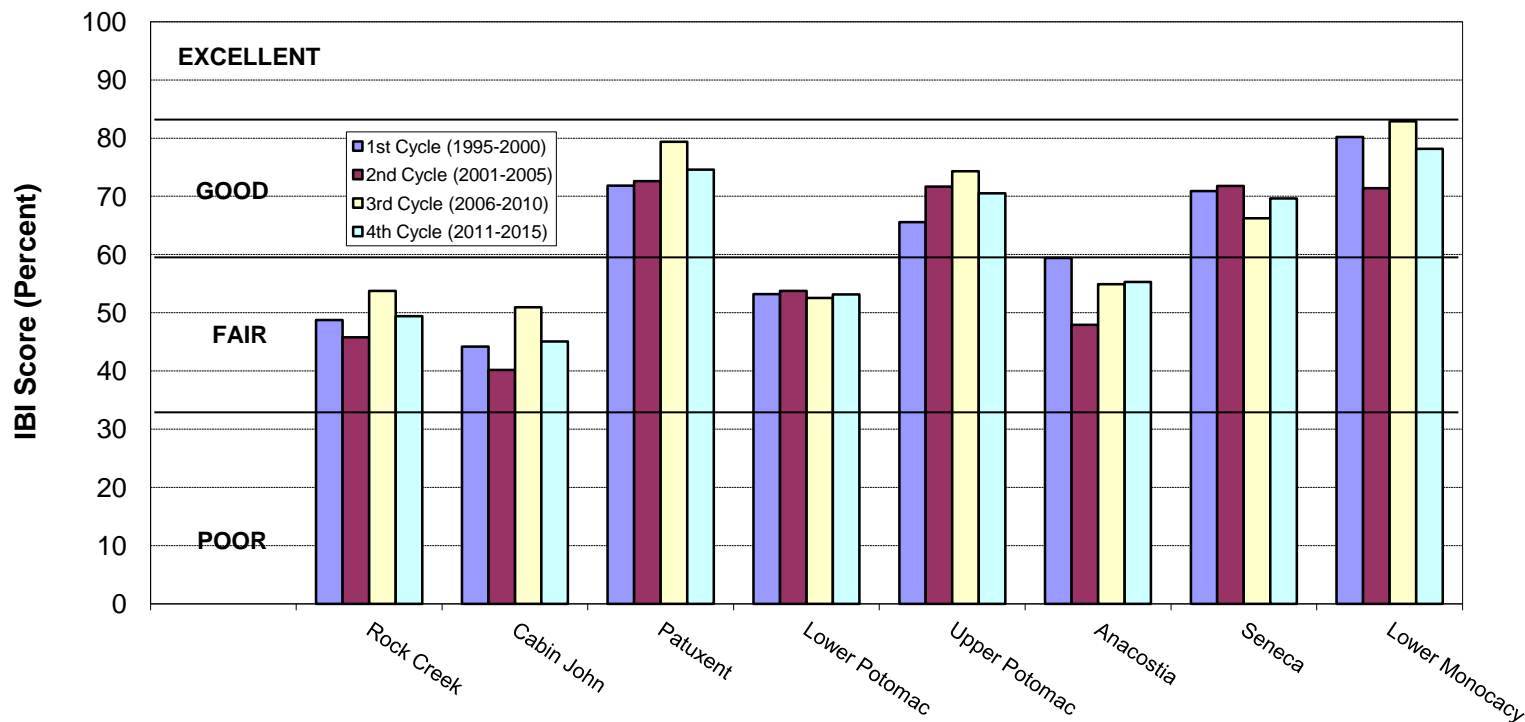


	Actual				Projections				
	2008	2009	2010	2011	2012	2013	2014	2015	2016
IBI Score	55%	58%	58%	59%	62%	63%	65%	66%	68%

The Index of Biological Integrity (IBI) is a combined score of the health of the fish and macro-invertebrate biological communities. The IBI score is out of a possible 100%, with a score of greater than 60% indicating "good" water quality.



Headline Measure Supporting Data: Individual Watershed IBI Scores



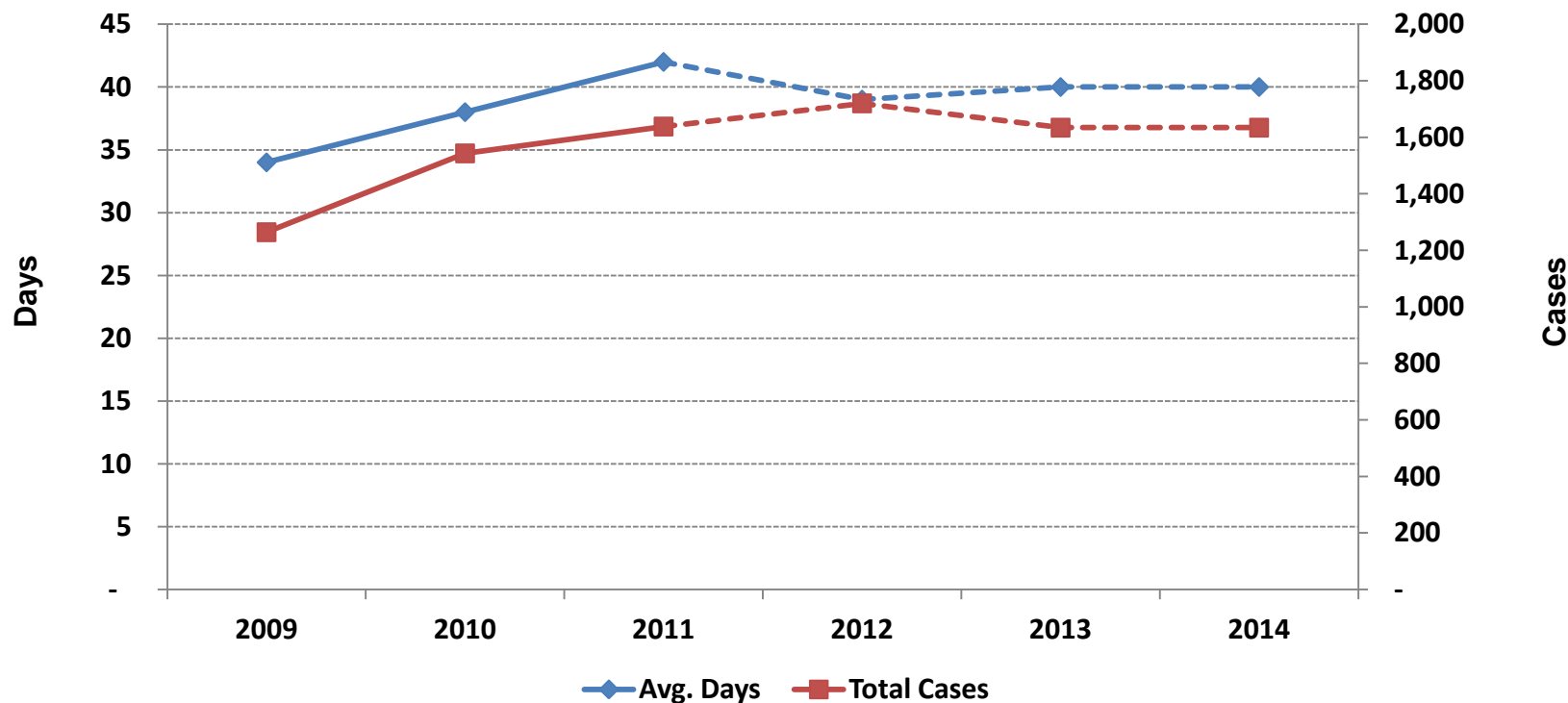
* Anacostia watershed score for 4th cycle is based on data collected in 2011

** All other watershed scores for 4th cycle are based on an average of scores from first three cycles of monitoring

According to DEP, drought, severe weather and other natural events are beyond the County's control but can adversely affect the biological sampling results (IBI scores) as the scores from the period 2001-2005 indicate.



Average Number of Days to Resolve Incoming Complaints



	Actual			Projections		
	2009	2010	2011	2012	2013	2014
Avg. Days	34	38	42	39	40	40
Total Cases	1,264	1,543	1,638	1,720	1,634	1,634



Average Number of Days to Resolve Incoming Complaints

	Actual						Projections					
	FY2009		FY2010		FY2011		FY2012		FY2013		FY2014	
Case Type	Cases	Avg. Case Length	Cases	Avg. Case Length	Cases	Avg. Case Length	Cases	Avg. Case Length	Cases	Avg. Case Length	Cases	Avg. Case Length
Ambient Air	190	42	156	50	131	60	138	55	142	55	142	55
Hazmat	48	19	26	34	35	31	37	33	33	33	33	33
IAQ	142	38	127	51	98	54	103	53	109	53	109	53
Noise	247	46	287	58	303	76	318	67	303	67	303	67
Solid Waste	385	29	419	31	471	37	495	34	461	34	461	34
Stormwater	121	25	125	44	104	67	109	56	113	56	113	56
Water Quality	131	26	222	19	315	14	331	17	289	17	289	17
FOIA	NA	NA	181	24	181	17	190	21	184	21	184	21
Total	1264	34	1543	38	1638	42	1720	39	1634	40	1634	40



Percent Change in Average Number of Days to Resolve Incoming Complaints Compared to Number of Complaints

In some instances, despite a lower number of cases, the average number of days to resolve the complaint are increasing. This performance improved from FY10 to FY11.

		Ambient Air	Hazmat	IAQ	Noise	Solid Waste	Storm Water	Water Quality	FOIA
2009-2010	Cases	-18%	-46%	-11%	16%	9%	3%	69%	NA
	Days	19%	79%	34%	26%	7%	76%	-27%	NA
2010-2011	Cases	-16%	35%	-23%	6%	12%	-17%	42%	0%
	Days	20%	-9%	6%	31%	19%	52%	-26%	-29%

Key:

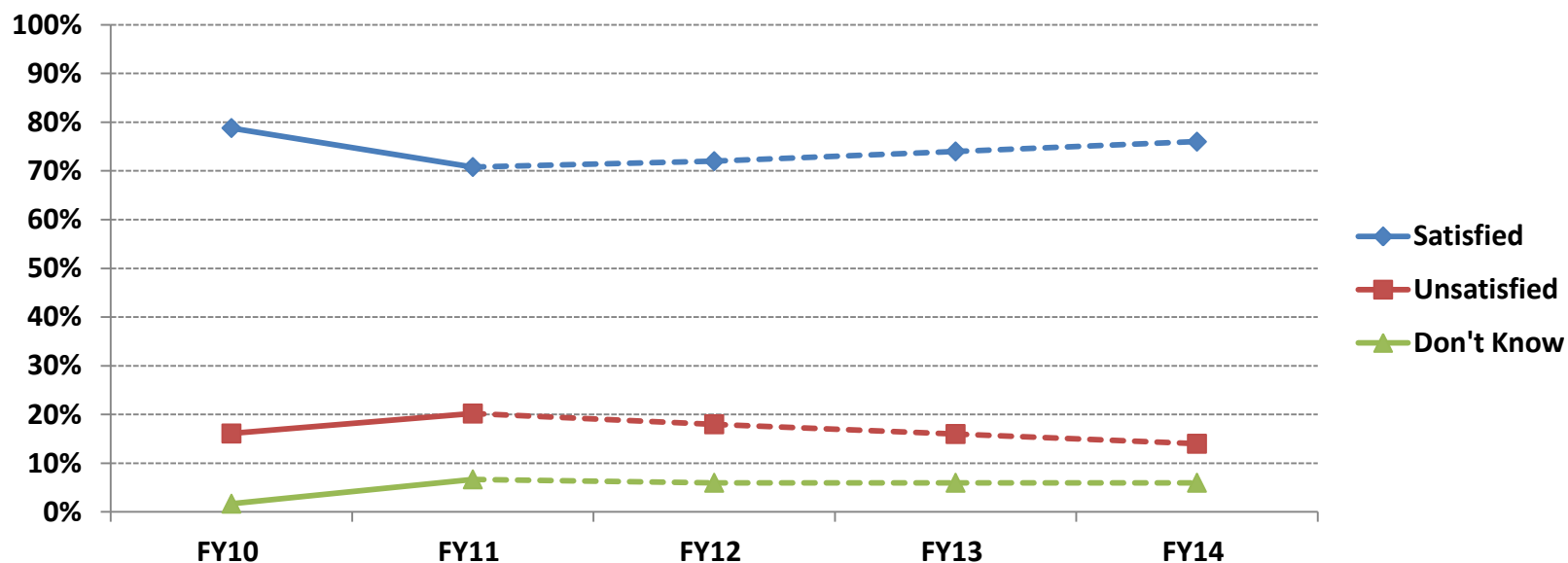
% Change in Avg. Days Positive
% Change in Cases is Negative

% Change in Avg. Days Positive
% Change in Cases is Positive

% Change in Avg. Days Negative
% Change in Cases is Positive



Percent Satisfied with DEP Response to Environmental Complaints



	Actual		Projections		
	FY10	FY11	FY12	FY13	FY14
Total Sent	495	289	400	450	500
Total Returned	118	89	120	135	150
Response Rate	24%	31%	30%	30%	30%
Satisfied	78.8%	70.8%	72.0%	74.0%	76.0%
Unsatisfied	16.1%	20.2%	18.0%	16.0%	14.0%
Don't Know	1.7%	6.7%	6.0%	6.0%	6.0%
No Response Chosen	3.4%	2.2%	4.0%	4.0%	4.0%



Residential/Non-residential Energy Use as a Measure of Greenhouse Gas Reductions

(Figures in million metric British Thermal Units)

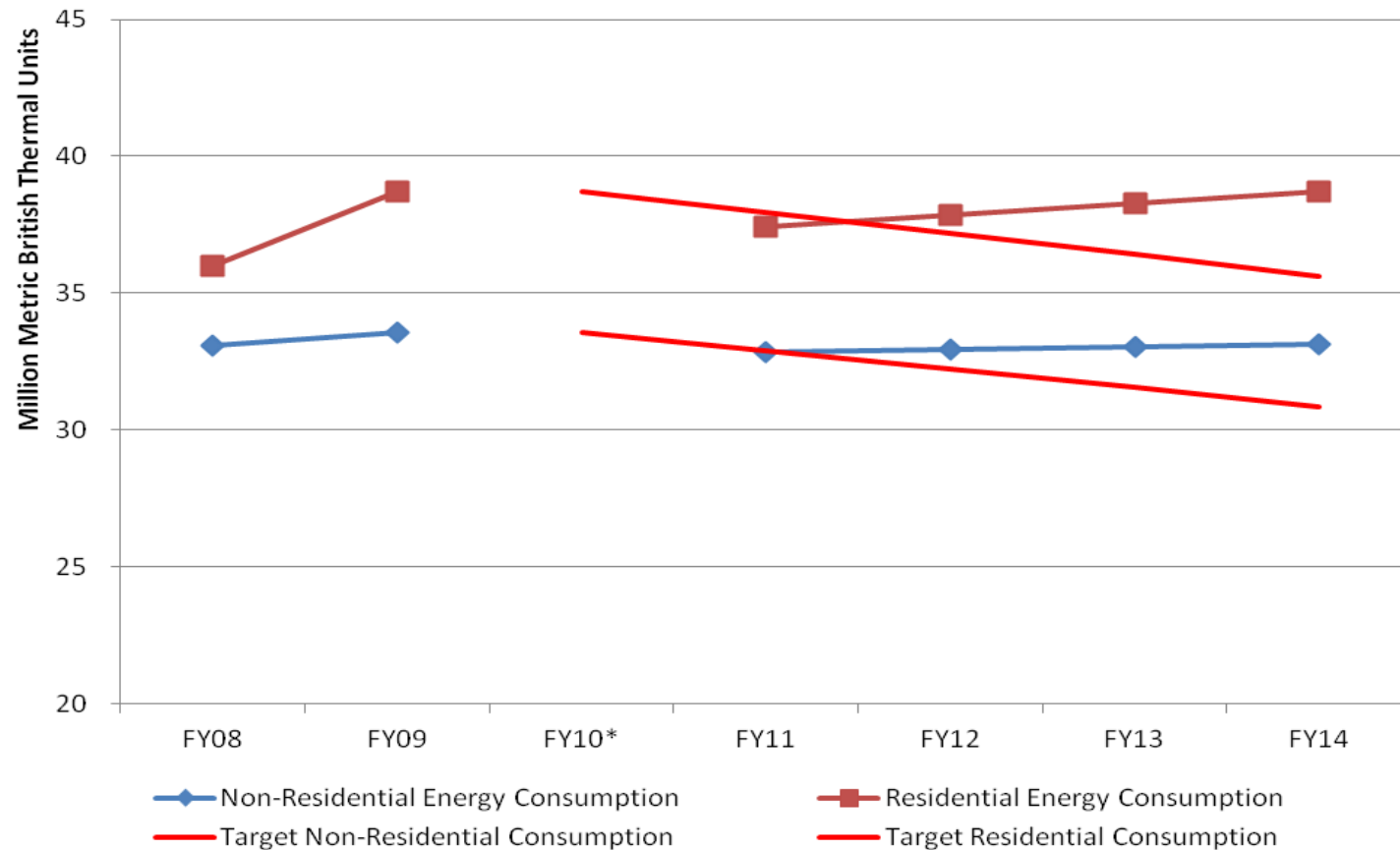
	Actual				Projections		
	FY08	FY09	FY10*	FY11	FY12	FY13	FY14
Non-Residential Energy Consumption	33,101,269	33,553,255	n/a	32,834,703	32,928,401	33,022,098	33,115,795
Difference from Previous Year	547,657	451,987	n/a	(718,552)	93,697	93,697	93,697
Target Consumption	n/a	n/a	33,553,255	32,882,190	32,211,125	31,540,060	30,868,995
Projected Difference from Goal	n/a	n/a	n/a	(47,487)	717,275	1,482,038	2,246,800
Residential Energy Consumption	35,979,624	38,733,162	n/a	37,428,299	37,849,418	38,270,537	38,691,656
Difference from Previous Year	(185,317)	2,753,537	n/a	(1,304,863)	421,119	421,119	421,119
Target Consumption	n/a	n/a	38,733,162	37,958,498	37,183,835	36,409,172	35,634,509
Projected Difference from Goal	n/a	n/a	n/a	(530,200)	665,583	1,861,365	3,057,147

* FY2010 figures are not provided because accurate data is unavailable due to mid-year tax rate changes.



Residential/Non-residential Energy Use as a Measure of Greenhouse Gas Reductions

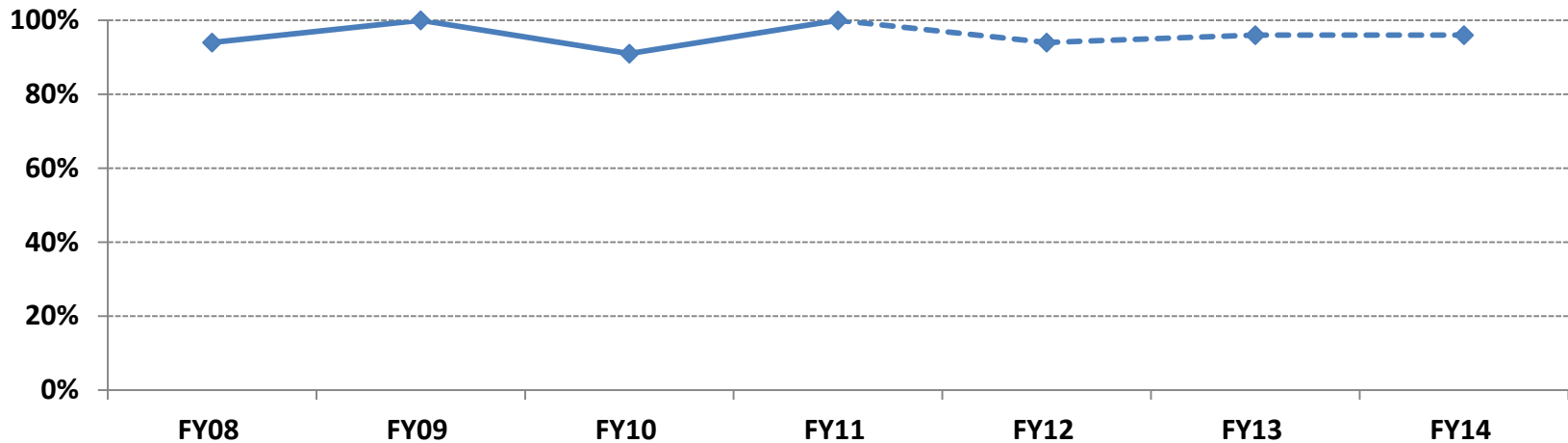
(Figures in million metric British Thermal Units)



Current energy consumption and projections demonstrate an opposite trend to targeted rates.



Percent Concurrence of County Council Water and Sewer Service Actions with DEP Recommendations



	Actual				Projections		
	FY08	FY09	FY10	FY11	FY12	FY13	FY14
Requests Received with Actions Completed	32	17	11	12	16	23	25
Requests with Final Decisions in Agreement with DEP	30	17	10	12	15	22	24
% Accepted	94%	100%	91%	100%	94%	96%	96%



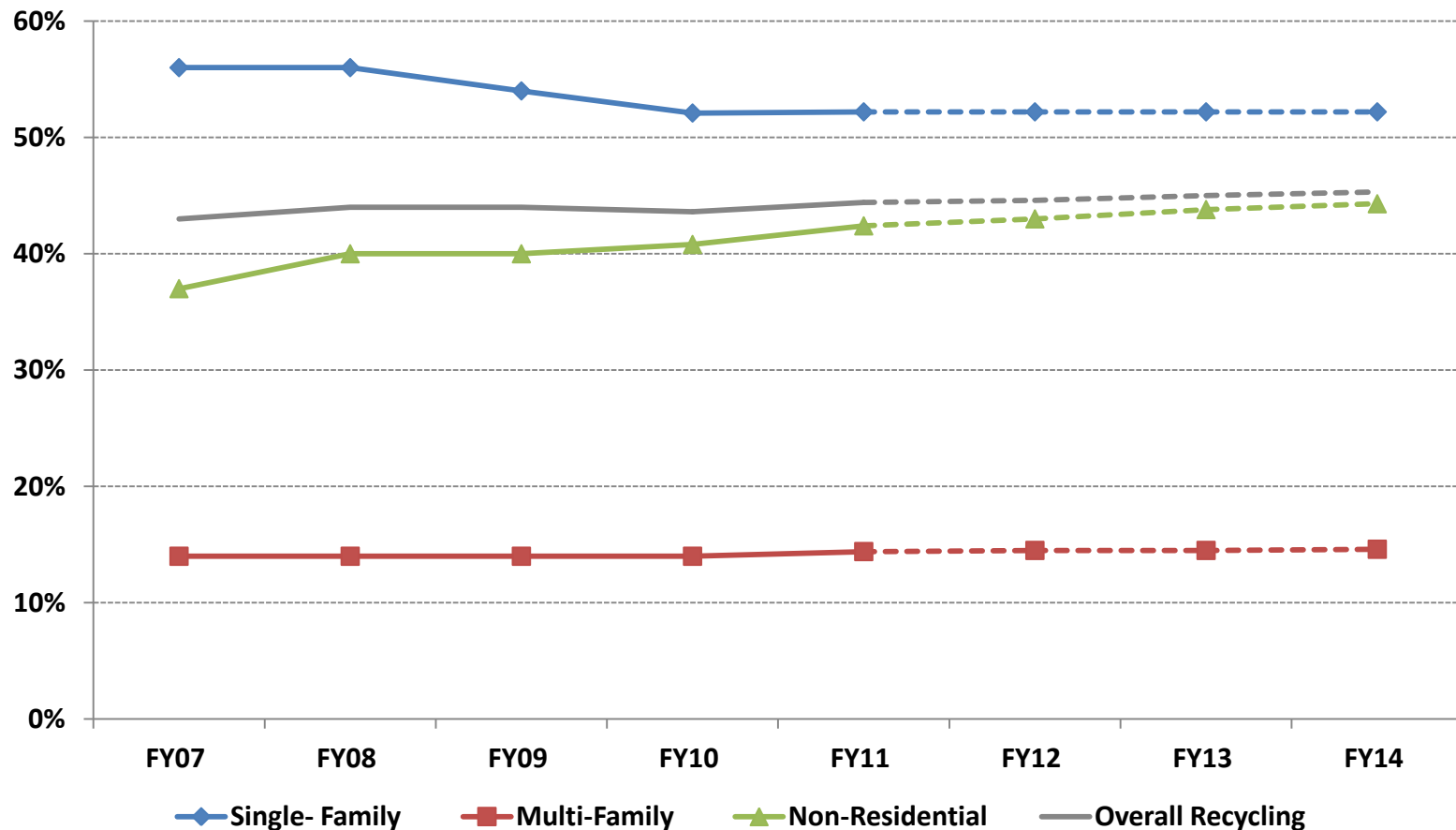
Percent of Total Municipal Solid Waste Recycled

	Actual					Projections		
	FY07	FY08	FY09	FY10	FY11	FY12	FY13	FY14
Single- Family	56%	56%	54%	52%	52%	52%	52%	52%
Multi-Family	14%	14%	14%	14%	14%	15%	15%	15%
Non-Residential	37%	40%	40%	41%	42%	43%	44%	44%
Overall Recycling Rate	43%	44%	44%	44%	44%	45%	45%	45%

The comprehensive strategies and initiatives to reach the County's 50 percent recycling goal includes a combination of outreach, education, technical assistance, training, and enforcement.

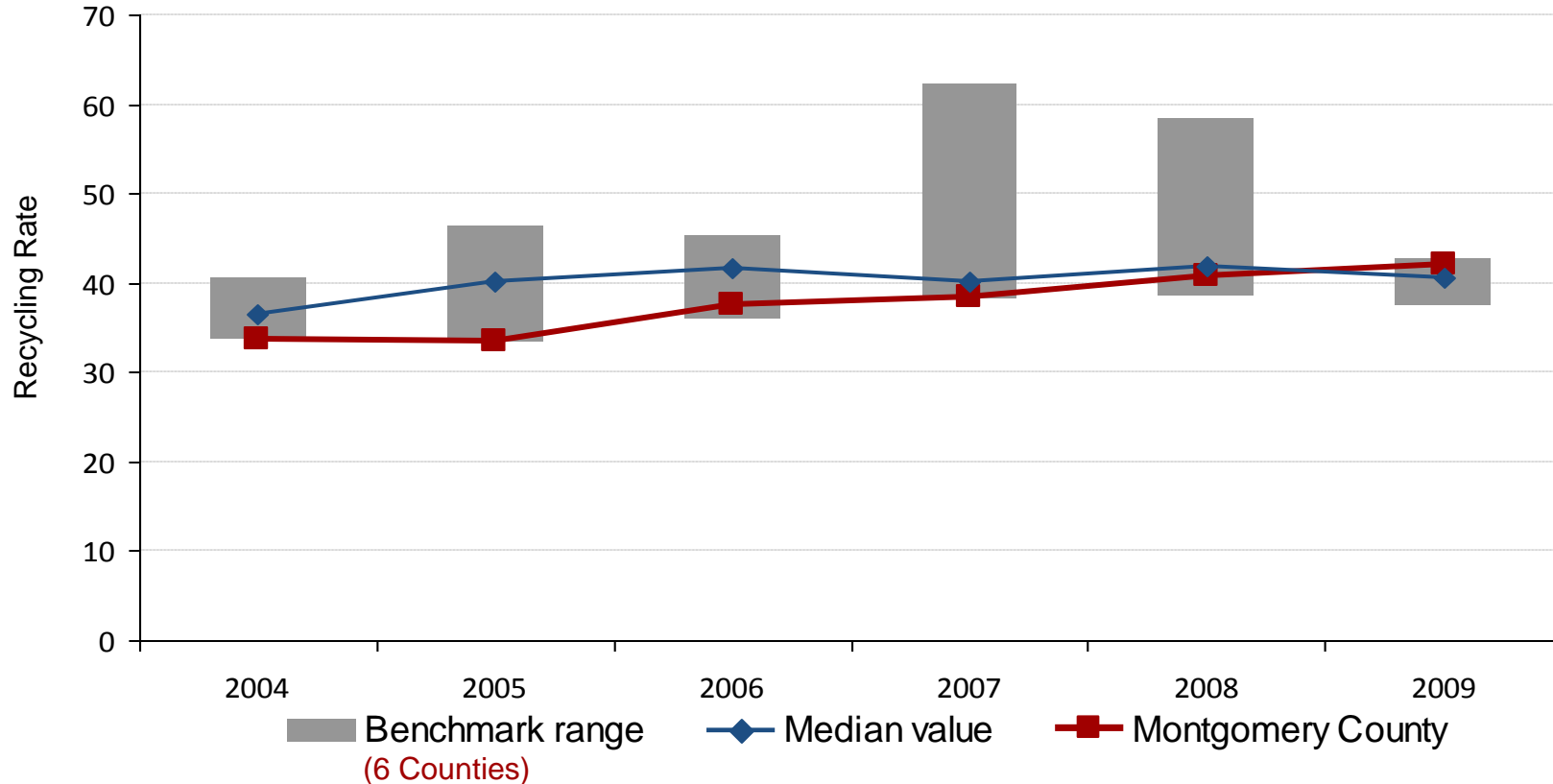


Percent of Total Municipal Solid Waste Recycled



Healthy and Sustainable Communities

Indicator: Maryland Recycling Act (MRA) Rate¹



In 2009, the median value was 41 percent. In Montgomery County, the recycling rate was 42% ².

In 2009, the highest value was 62 and the lowest value was 38.

Source: Maryland Department of the Environment "Waste Diversion Activities Report" 2006-2009

1-Data is annually self-reported to Maryland Department of the Environment by each county and calculated based on the MRA mandate. It includes ash recycling, which is not part of Montgomery Co's program.

2-Montgomery Co-calculated recycling rate is higher, 47%, due to its yard waste recycling component.



Missed Collection Complaints per Week

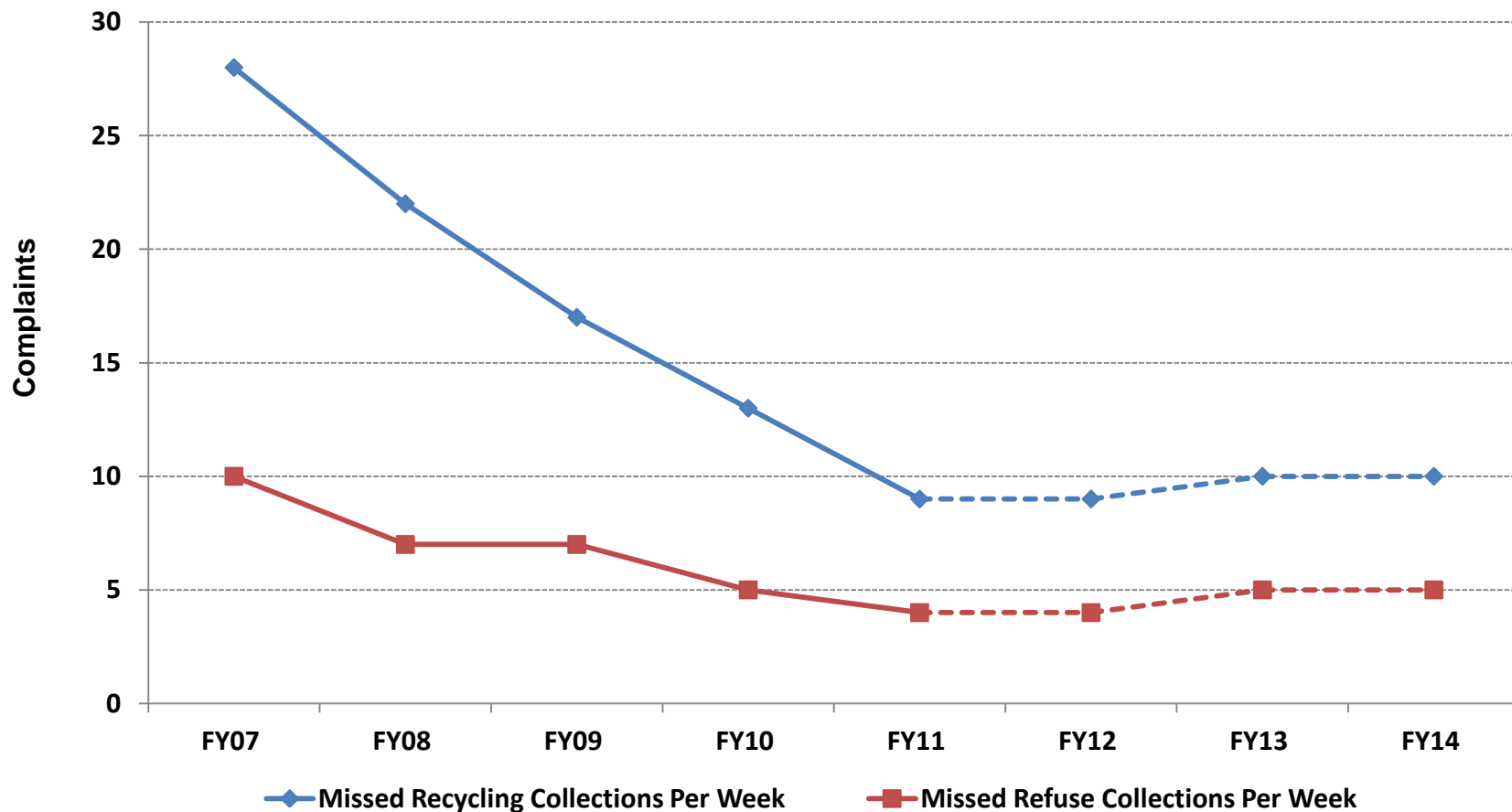
	Actual					Projections		
	FY07	FY08	FY09	FY10	FY11	FY12	FY13	FY14
Missed Recycling Collections Per Week	28	22	17	13	9	9	10	10
Households Served (Recycling)	208,444	209,306	209,935	210,595	211,363	211,545	212,302	213,060
Missed Refuse Collections Per Week	10	7	7	5	4	4	5	5
Households Served (Refuse)	87,650	89,906	90,289	90,961	90,986	91,081	91,407	91,733

Missed Collection: a collection that does not occur on the resident's scheduled day.

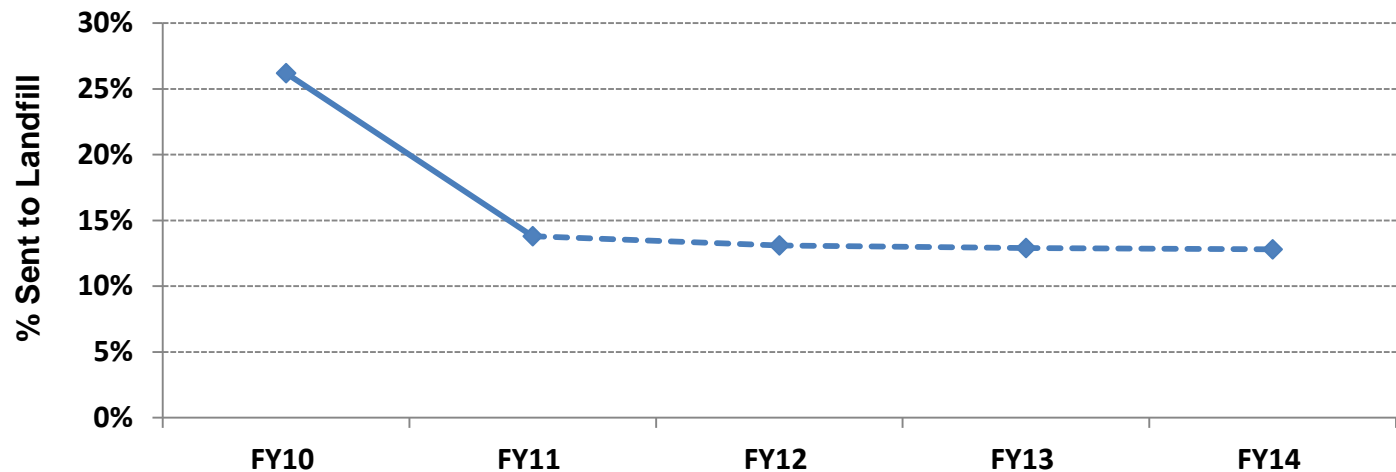
There has been a steady decline in the number of missed collections for both recycling and refuse collection.



Missed Collection Complaints per Week



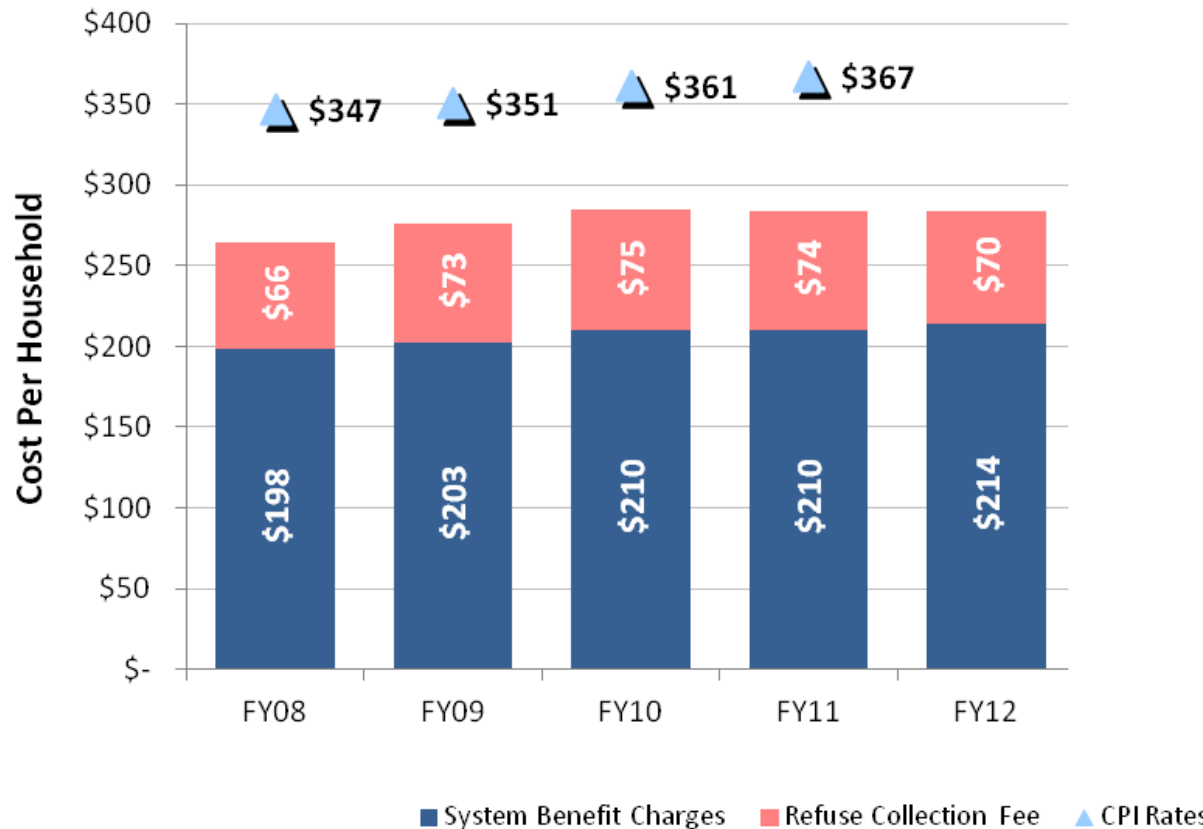
Percent of Total Municipal Solid Waste Sent to Landfill



	Actual		Projections		
	FY10	FY11	FY12	FY13	FY14
Total tons of MSW	1,080,346	1,120,143	1,131,876	1,142,996	1,154,684
Tons of MSW Exported & Disposed in Non-County Facility	149,541	145,701	147,621	147,621	146,981
Tons of MSW Converted to Ash by Non-County Facility	496	792	644	644	693
Tons of Ash (Processed MSW) Landfilled by DSWS	133,236	8,170			
Percent MSW Landfilled to Total MSW	26.2%	13.8%	13.1%	12.9%	12.8%



Single-Family Solid Waste Charges

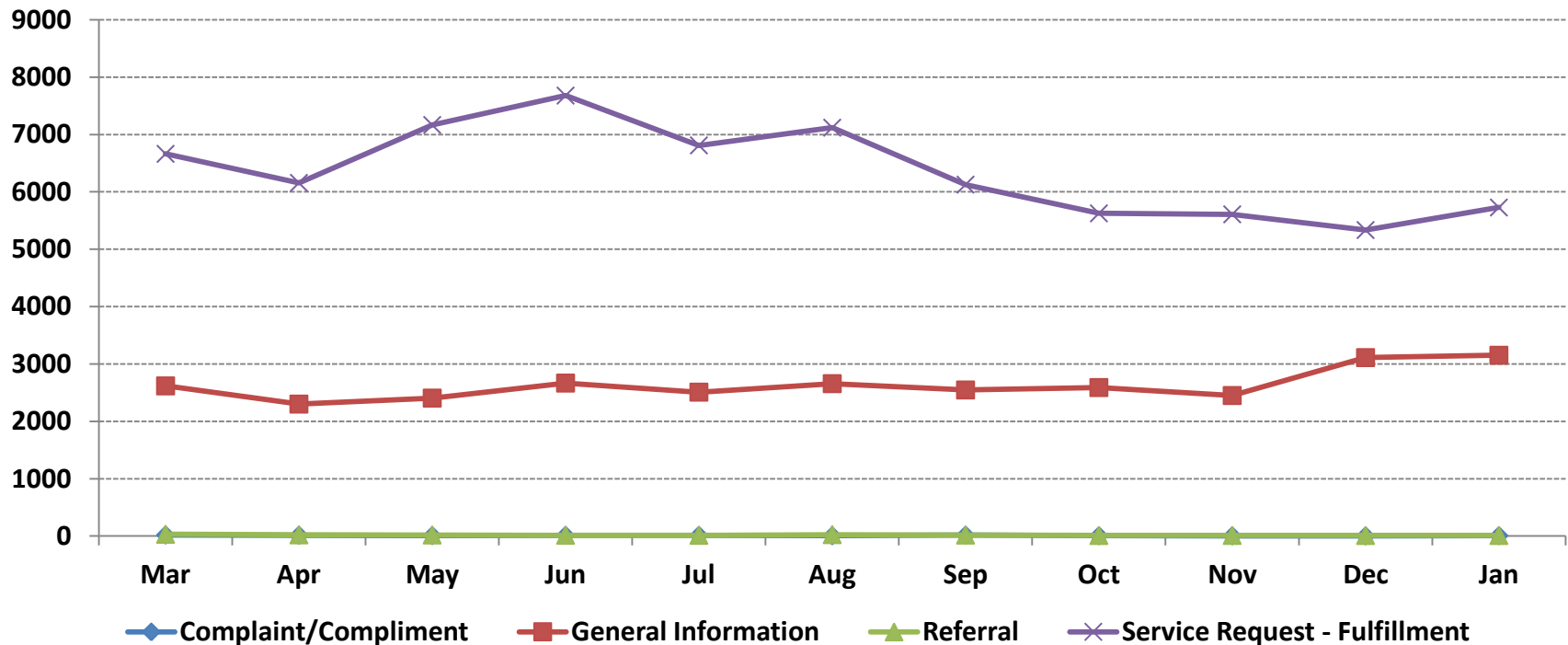


The Solid Waste Enterprise Fund was established by law to account for all revenues and expenditures of the integrated solid waste management system.

There has not been a corresponding increase in the single family waste charge as the Consumer Price Index has continued to rise.



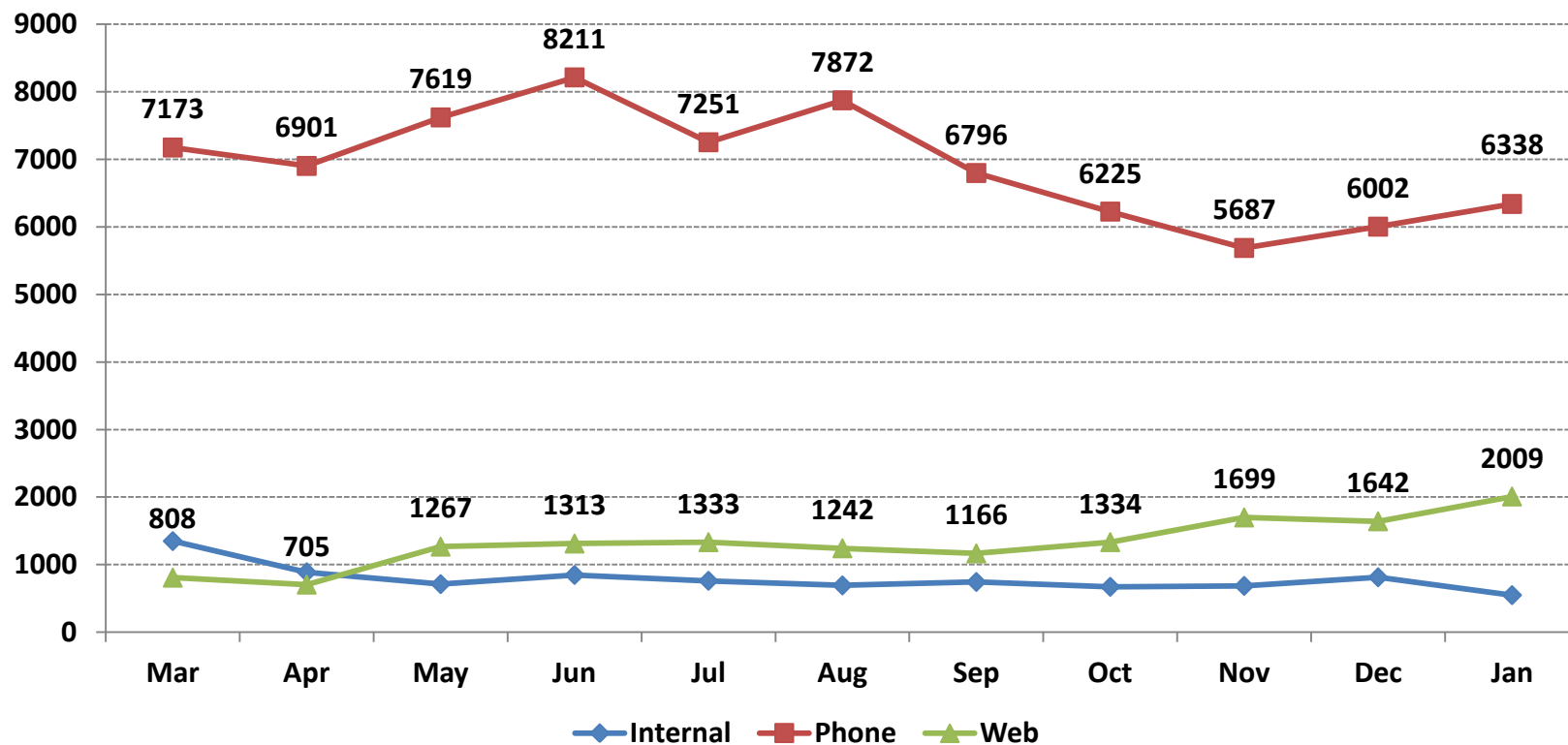
DEP MC311 Customer Requests by Type



Customer Request Type	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Total
Complaint/Compliment	18	14	8	12	12	6	16	6	4	3	7	106
General Information	2618	2301	2405	2667	2509	2657	2547	2589	2450	3111	3152	29006
Referral	31	21	19	14	13	25	17	10	11	10	10	181
Service Request - Fulfillment	6663	6158	7167	7679	6811	7120	6127	5626	5609	5335	5728	70023
Grand Total	9330	8494	9599	10372	9345	9808	8707	8231	8074	8459	8897	99316



DEP Customer Request Intake Type



Since October, additional DEP services are available via the web portal, resulting in a steady increase in web portal generated service requests.



DEP MC311 General Information Customer Requests

Solid waste related inquiries account for 95% of the general information customer requests.

General Information Request Type	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Grand Total
Environmental Code Enforcement	24	43	34	47	37	39	33	44	31	31	37	400
Environmental Programs	26	20	18	17	11	24	24	18	16	15	20	209
General Information	3	3		1		1	1	2				11
Solid Waste	2440	2140	2273	2549	2407	2521	2429	2468	2329	2943	2915	27414
Water Sewer	18	13	7	6	18	12	7	14	6	3	16	120
Watershed	14	12	10	17	12	27	16	25	34	93	145	405
(blank)	93	70	63	30	24	33	37	18	34	26	19	447



Overview of DEP Service Level Agreement (SLA) Findings

- Solid waste accounts for 98% of the DEP service requests that are handled by the department
- 35% of the solution areas are closed more than 14 days before the SLA
- On average, service requests are closed 8 days before the SLA
- Environmental Code Enforcement service requests are being closed when the case is entered into a legacy system not when the case reaches finality
 - Although in FY11 code enforcement cases took an average of 42 days, these cases were closed in Siebel at an average of 2 days, 28 short of the 30 day SLA

Departmental Service Request Fulfillments By Area Type

Row Labels	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Total
Environmental Code Enforcement	98	59	73	88	73	74	56	58	69	77	58	783
Environmental Programs	10	6	11	12	10	12	22	18	17	18	18	154
Solid Waste	6523	6063	7061	7565	6705	6996	6030	5513	5495	5138	5550	68639
Water Sewer	4	1	1	1	2	1	2	4	2	2	1	21
Watershed	20	15	16	11	19	35	17	33	25	99	101	391
Grand Total	6663	6158	7167	7679	6811	7120	6127	5626	5609	5335	5728	70023



Comparison of Net-workdays to Close Versus Service Level Agreement (3 Days Under or More)

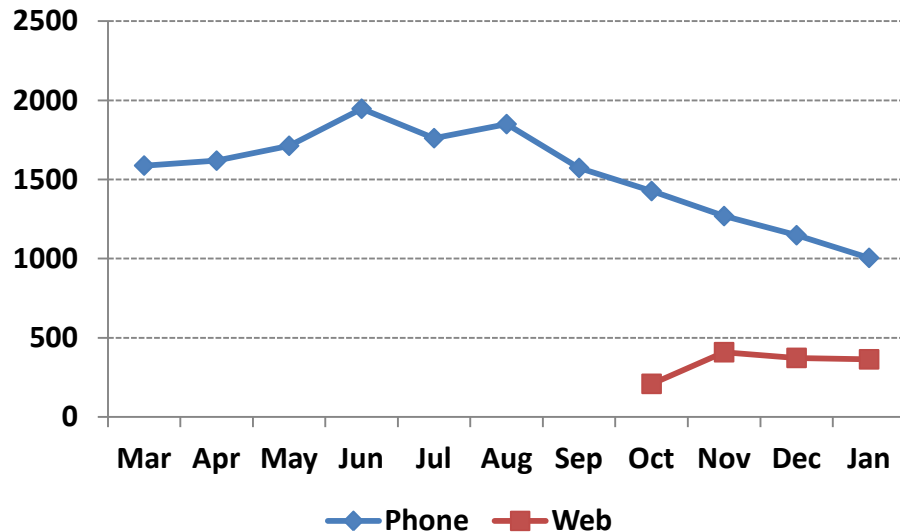
Solution Area	SLA (Days)	Average Networkdays	Average Days b/w Networkdays and SLA	# of SRs
Container Problem	5	2	-3	275
Literature Items - Residential Trash and Recycling	5	2	-3	1482
Bin Request - New (Recycling)	10	6	-4	14444
Bin Pick-Up (Recycling)	10	6	-4	3456
Information about the Rainscapes program/Rainscapes Rewards/Targeted Neighborhoods	30	3	-27	21
Noise	30	3	-27	157
Stormwater management (ponds, underground structures, dry ponds, wetlands, detention basins)	30	2	-28	22
Air Pollution - Indoor	30	2	-28	65
Air Pollution - Outdoor	30	2	-28	41
Illegal Dumping	30	2	-28	360
Agricultural burning permits	30	2	-28	35
Cart (Single Family) Request - New (Recycling)	45	7	-38	1130
Cart (Townhouse) Request - New (Recycling)	45	7	-38	1162

* Net-workdays is an Excel function that calculates the number of work days between two calendar dates. This function does not take into account holidays. Only solution areas with a difference of 5 or more days and 10 or more occurrences are included.

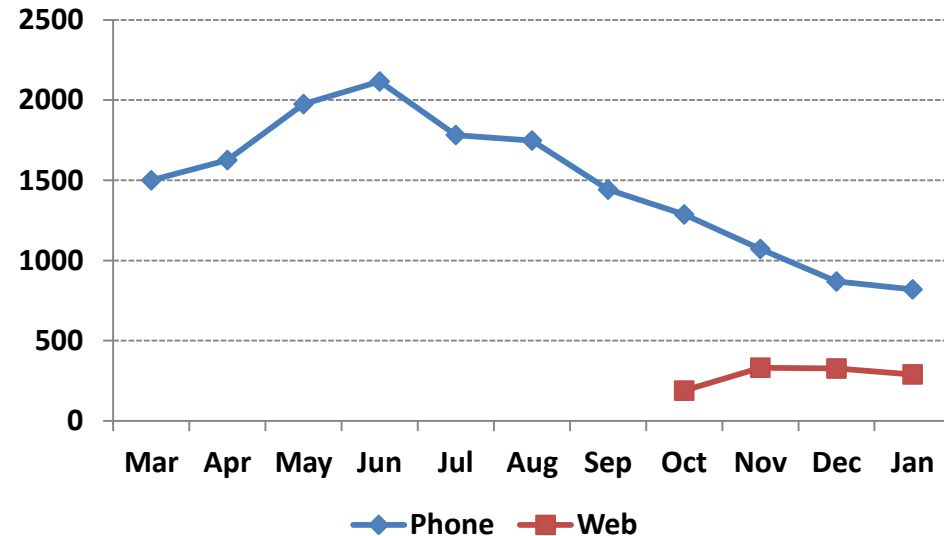


Solid Waste Web Portal Usage

Bulk Trash



Scrap Metal



In October of 2011, DEP and MC311 finished the process of placing bulk trash and scrap metal requests online.

Since October, average monthly request volumes generated by phone have decreased 11 and 27 percent respectively.



MC311 Customer Request Data: CountyStat Reflections and Recommendations

- Since 35% of the solution areas are closed more than 14 days before the SLA, these should be reexamined to determine if more stringent timelines need to be in place
- Service requests should not be closed in the system until the case reaches finality



Wrap Up and Follow Up Items

